

DOES SURGERY IMPROVE LONG-TERM OUTCOMES IN WOMEN WITH CHRONIC PELVIC PAIN?

Dr Michael Duff Professor Sonia Grover; Dr Samantha Mooney
Isabella Conroy, Ilona Jakab, Katharine Robertson, Alish Quinless, Shweta Nair,
Alexandra McCutchan, Nimita Origanti, Amy Fitzgerald, Siana Madden,
Kelly Mirowska-Allen, Megan Sewell, Sarah Maxwell
Department of Obstetrics and Gynaecology Mercy Health

Background

Endometriosis is a major causes of CPP and laparoscopic ablation has been a mainstay of treatment despite little evidence of long term benefit. Excision of endometriosis lesions has been suggested to improve pain at 6 and 12 months follow-up in a number of randomised-controlled trials (3, 4). However, there has been limited research into the efficacy and risks of laparoscopic surgery on pain scores in the long term. Preliminary studies have found that recurrence of pain can occur in up to 40% of patients after a mean duration of 19.7 months causing 36% of patients to require repeat surgery (5)

Aim

To analyse the long term effects of laparoscopic surgery on pain scores in women with CPP

Method

Women aged 18-50 referred to the Mercy Hospital for Women with pelvic pain

Included participants (n=471)

Valid laparoscopic surgery patients (n=102)

Patients who completed a survey within 6 months of surgery and completed >1 follow-up survey (n= 57)

Pre-op survey questionnaires:

Baseline demographics

- Pain scores (6-point Likert scale for each pain category; giving a Total Pain Score out of 30)
- Follow-up surveys sent every 6 months for a total of 36 months since referral

Data analysis performed using STATA

Results and Discussion

- Completed surveys after 18 months follow up, 30.90% reported total pain scores greater than their pre-op scores (see Figure 1)
- Patients saw the greatest decrease in mean pain score in the first 6 months (mean decrease of 2.39/30) (see. Figure 2) as has been shown in other short-term follow-up studies
- Patients saw an increase in mean total pain score after 30 months follow-up such that at maximum follow-up pain scores were only 0.60 less pre-op scores on average (see Figure 2)
- Only 18 patients responded to a survey after 30 months follow-up which affects the statistical significance of these findings

Total Pain Scores of Patients at >18 months

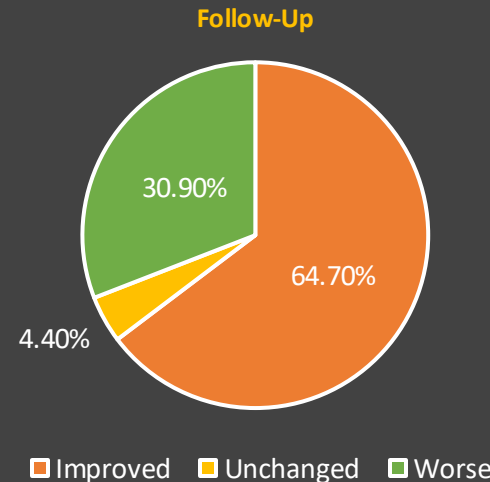


Figure 1: Proportion of all patients who experienced an improvement, no change or worsening of their Total Pain Scores at >18 months follow-up

Mean Change in Total Pain Score vs Time

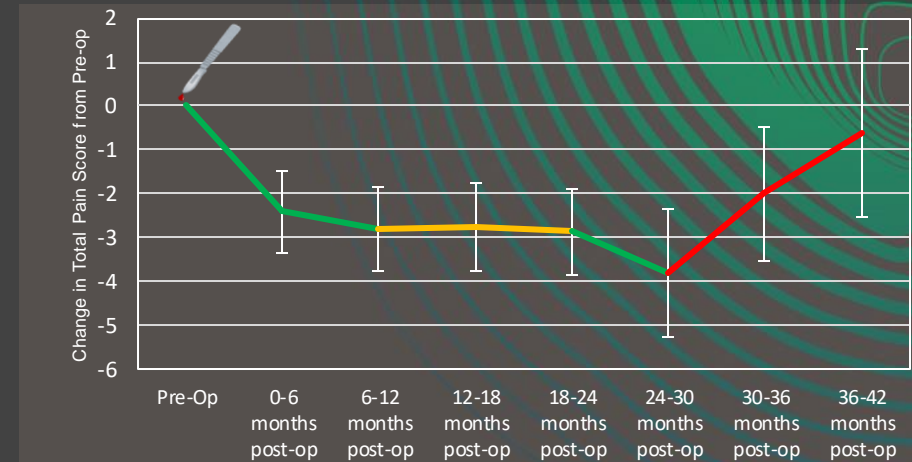


Figure 2: Mean change in Total Pain Score vs Time Shows the net change in Total Pain Score out of 30 from baseline (pre-op) for each participant across the various time periods. Scalpel denotes time of surgery.

These results support preliminary findings which suggest that recurrence or worsening of pain in the long-term following laparoscopy is common. Due to participant drop-out it is difficult to draw conclusions with statistical significance. However, the 30.90% chance of experiencing worsened pain after 18 months despite laparoscopy is a pertinent result which should be conveyed to patients when gaining informed consent for surgery.

1. Speer LM, MacMillan S, Edele T. Chronic Pelvic Pain in Women. Am Fam Physician. 2016;93(3):380-7.
2. Purdie J, Omasawa K, Kovoor F, Purdie V, Lancaster G, Barton Smith P. Laparoscopic Excision Versus Ablation for Endometriosis-associated Pain: An Updated Systematic Review and Meta-analysis. Journal of Minimally Invasive Gynecology. 2017;24(5):747-56.
3. Adoni A, Hwang K, Hunter D, Wilton M, Finn P, Garry B. Laparoscopic excision of endometriosis: A randomized, placebo-controlled trial. Fertility and Sterility. 2004;82(4):1078-84.
4. Sutton CG, Ewen SP, Whitelaw N, Haines P. Prospective, randomized, double-blind, controlled trial of laser laparoscopy in the treatment of pelvic pain associated with minimal, mild, and moderate endometriosis. Supported by Birthright Research Grant (Ref53/90), Royal College of Obstetricians and Gynaecologists. 1994;62(4):699-700.
5. Adoni A, Hwang K, Clayton RB, Garry B. The effects and effectiveness of laparoscopic excision of endometriosis: a prospective study with 2-5 year follow-up. Human Reproduction. 2003;18(9):1922-7.

